LISTING OF THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claim in the application:

Amendments to the Claims:

1. (currently amended) A method of treating spinal disc defects comprising the steps of:

    a) preparing a disc treatment site;

    b) providing a ~~substantially two-dimensionally shaped~~ disc defect repair material comprising SIS in the form of a strip having a length, a width, and a thickness, wherein the thickness is at least one order of magnitude lower than either the width or length;

    c) folding the material, and

    d) inserting the folded repair material into the disc treatment site to be repaired.

2-7. (cancelled)

8. (Withdrawn) The method of claim 6, wherein the bioabsorbable material is collagen.

9. (Withdrawn) The method of claim 5, wherein the material is a non-bioabsorbable material.

10. (Withdrawn) The method of claim 9, wherein, the non-bioabsorbable material is selected from the group consisting of polyacrylates, ethylene-vinyl acetates (and other acyl-substituted cellulose acetates), polyester (Dacron®), poly(ethylene terephthalate), polypropylene, polyethylene, polyurethanes, polystyrenes, polyvinyl oxides, polyvinyl fluorides, poly(vinyl imidazoles), chlorosulphonated polyolefins, polyethylene oxides, polyvinyl alcohols (PVA), polytetrafluoroethylenes, nylons, and combinations thereof.

11. (Withdrawn) The method of claim 10, wherein the non-bioabsorbable material is polyester (Dacron®).

12. (canceled)

13. (Canceled)

14. (canceled).

15. (Withdrawn) The method of claim 14, wherein the material is collagen.

16. (canceled).

17. (previously presented) The method of any one of claims 1, 4-7, 14, and 16, wherein the material is cell seeded.

18. (Original) The method of claim 17, wherein the cells are selected from stem cells, bone marrow cells, fibrocytes, adipocytes, chondrocytes, cells harvested from spinal discs in the body such as nucleus pulposus cells and annulus fibrosis, and combinations thereof.

19. (Withdrawn) The method of claim 18, wherein the cells are stem cells.

20. (previously presented) The method of any one of claims 1, 4-7, and 14-16 wherein the material is combined with an autologous medium prior to implantation.

21. (previously presented) The method of any one of claims 1, 4-7, 14, and 16, wherein the material is combined with an autologous medium is selected from platelet-rich plasma, platelet-poor plasma, bone marrow, whole blood and serum.

22. (Original) The method of claim 20, wherein the autologous medium is bone marrow.

23. (previously presented) The method of any one of claims 1, 4-7, and 14-16 wherein the material further comprises a bioactive factor.

24. (Original) The method of claim 23 wherein, the bioactive agent is selected from the group consisting of transforming growth factor-beta and agents in the same family of growth factors, platelet-derived growth factors, fibroblast growth factors, insulin-like growth factors, protein polymers such as RGD-peptides and Indian Hedgehog proteins, anti-inflammatory agents, angiogenic factors, hormones, hyaluronic acid and combinations thereof.

25. (Original) The method of claim 24, wherein the bioactive factor is a transforming growth factor-beta selected from the group consisting of TGF-ßl, TGF- ß2, and TGF-ß3, GDF-5, MP52, and BMPs .

26. (Original) The method of claim 17 wherein the material further comprises a bioactive factor.

27. (Original) The method of claim 26 wherein the bioactive factor is selective form the group consisting of transforming growth factor-beta and agents in the same family of growth factors, platelet-derived growth factors, fibroblast growth factors, insulin-like growth factors, protein polymers such as RGD-peptides and Indian Hedgehog proteins, anti-inflammatory agents, angiogenic factors, hormones, hyaluronic acid and combinations thereof.

28. (Original) The method of claim 27 wherein the bioactive factor is a transforming growth factor-beta selected from the group consisting of TGF-ßl, TGF- ß2, and TGF-ß3, GDF-5, MP52, and BMPs .

29. (Original) The method of claim 18 wherein the material further comprises a bioactive factor.

30. (Original) The method of claim 29 wherein the bioactive factor is selective form the group consisting of transforming growth factor-beta and agents in the same family of growth factors, platelet-derived growth factors, fibroblast growth factors, insulin-like growth factors, protein polymers such as RGD-peptides and Indian Hedgehog proteins, anti-inflammatory agents, angiogenic factors, hormones, hyaluronic acid and combinations thereof.

31. (Original) The method of claim 30 wherein the bioactive factor is a transforming growth factor-beta selected from the group consisting of TGF-ßl, TGF- ß2, and TGF-ß3, GDF-5, MP52, and BMPs .

32. (Original) The method of claim 20 wherein the material further comprises a bioactive factor.

33. (Original) The method of claim 32 wherein the bioactive factor is selective form the group consisting of transforming growth factor-beta and agents in the same family of growth factors, platelet-derived growth factors, fibroblast growth factors, insulin-like growth factors, protein polymers such as RGD-peptides and Indian Hedgehog proteins, anti-inflammatory agents, angiogenic factors, hormones, hyaluronic acid and combinations thereof.

34. (Original) The method of claim 33 wherein the bioactive factor is a transforming growth factor-beta selected from the group consisting of TGF-ßl, TGF- ß2, and TGF-ß3, GDF-5, MP52, and BMPs .

35. (Original) The method of claim 21 wherein the material further comprises a bioactive factor.

36. (Original) The method of claim 35 wherein the bioactive factor is selective form the group consisting of transforming growth factor-beta and agents in the same family of growth factors, platelet-derived growth factors, fibroblast growth factors, insulin-like growth factors, protein polymers such as RGD-peptides and Indian Hedgehog proteins, anti-inflammatory agents, angiogenic factors, hormones, hyaluronic acid and combinations thereof.

37. (Original) The method of claim 36 wherein the bioactive factor is a transforming growth factor-beta selected from the group consisting of TGF-ßl, TGF- ß2, and TGF-ß3, GDF-5, MP52, and BMPs .

38. (Original) The method of claim 22 wherein the material further comprises a bioactive factor.

39. (Original) The method of claim 38 wherein the bioactive factor is selective form the group consisting of transforming growth factor-beta and agents in the same family of growth factors, platelet-derived growth factors, fibroblast growth factors, insulin-like growth factors, protein polymers such as RGD-peptides and Indian Hedgehog proteins, anti-inflammatory agents, angiogenic factors, hormones, hyaluronic acid and combinations thereof.

40. (Original) The method of claim 39 wherein the bioactive factor is a transforming growth factor-beta selected from the group consisting of TGF-ßl, TGF- ß2, and TGF-ß3, GDF-5, MP52, and BMPs .

41. (currently amended) A method of treating spinal disc defects comprising the steps of:

a) preparing a disc treatment site;

b) manipulating a ~~substantially two-dimensionally shaped~~ disc defect repair material in the form of a strip having a length, a width, and a thickness, wherein the thickness is at least one order of magnitude lower than either the width or length into a mushroom shape; and

c) inserting the repair material into the disc to be repaired.